

SUPPORT FOR THE AMENDMENTS

Claims 15-21 are amended to use structure and wording more consistent with U.S. patent law practice and to more clearly describe the invention.

Support for new Claim 22 is found in Claim 21 and on page 6, lines 20-22, in the specification.

No new matter is believed added to this application by entry of this amendment.

Upon entry of this amendment, Claims 15-22 are active.

REMARKS/ARGUMENTS

The claimed invention provides a process for the manufacture of a plastic layer or a multilayer comprising the plastic layer, the plastic layer comprising: a base plastic; and a barrier plastic; wherein the process comprises: extruding a composition comprising the base plastic and the barrier plastic to obtain the layer or multilayer, wherein the barrier plastic is dispersed in the base plastic as nodules having a diameter of less than or equal to one micron, the barrier plastic is incompatible with the base plastic, the base plastic is a high density polyethylene, and the barrier plastic is a vinyl alcohol polymer.

The present invention as described in Claim 1 and the claims dependent thereon provides a process for the recycling and reuse of plastic multilayer hollow bodies such as fuel tanks which contain layers of barrier and base plastics where the base plastic is a high density polyethylene and the barrier plastic is a vinyl alcohol polymer. No such process is disclosed or suggested in the cited references.

The rejection of Claims 15-17 and 19 under 35 U.S.C. 102(b) over Takado et al. (U.S. 5,384,172) is respectfully traversed.

Takado describes a multi-layer plastic fuel tank containing a high-density polyethylene layer, a polyamide layer and a modified high-density polyethylene layer

containing polyethylene modified by incorporation of an unsaturated carboxylic acid  
(Abstract).

Nowhere does this reference disclose or suggest a plastic layer of the fuel tank being a layer of high density polyethylene containing dispersed nodules of a vinyl alcohol polymer. Accordingly, Applicants submit that as Takado neither discloses nor suggests all the claimed elements, the cited reference can neither anticipate nor render the claimed invention obvious and respectfully request that the rejection of Claims 15-17 and 19 under 35 U.S.C. 102(b) over Takado be withdrawn.

The rejection of Claim 21 under 35 U.S.C. 103(a) over Takado is respectfully traversed.

Applicants note that Claim 21 indirectly depends from Claim 15 and includes all the description of the independent claim. The failure of Takado to anticipate or render the present invention obvious as described in Claim 15 is described above. Therefore, Applicants submit that the reference cannot render the dependent claim obvious and respectfully request that the rejection of Claim 21 under 35 U.S.C. 103(a) over Takado be withdrawn.

The rejection of Claims 18 and 20 under 35 U.S.C. 103(a) over Takado in view of Hock et al. (U.S. 6,399,170) is respectfully traversed.

The Office has acknowledged that Takado fails to teach EVOH as a barrier material (Official Action dated March 17, 2010, page 7, line 4) and cites Hock as showing EVOH as a barrier material.

Hock describes a plastic closure as a cap having a base and a liner secured to the interior of the cap. Hock describes a content of the barrier material in the liner as 20-60% by weight of the barrier material (Col. 3, lines 46-47). In contrast, the present invention

describes less than 1% by weight of barrier material in the inner layer and 1-8% by weight in the intermediate layer.

Furthermore, Hock describes that the liner is formed by compression molding (Col. 4, lines 17-19) and further describes (lines 20-25):

. . . and within which the heat and pressure from compression molding forms the barrier polymer into platelets that are oriented essentially parallel to the plane of the disk. The resulting liner exhibits greatly lowered gas transmission as compared with a liner formed of a similar blend in other than a compression molding operation.

In contrast, Takado describes an extrusion process (Col. 3, lines 28-32, Col. 7, line 50 to Col. 15, line 4).

Applicants submit that one of ordinary skill would not look to the description of Hock, which is directed to a container closure with a liner to seal gases, water vapor and flavorants for providing barrier properties in a fuel tank. The two references are directed to unrelated technologies. Moreover, Applicants submit that Hock requires compression molding to obtain the barrier properties while Takado is directed to an extrusion process. Applicants submit that at the very least, combining the description of Hock with that of Takado would change the principle of operation of the primary reference.

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)


In view of all the above, Applicants submit that the cited combination of references cannot render the claimed invention obvious and withdrawal of the rejection of Claims 18 and 20 under 35 U.S.C. 103(a) over Takado in view of Hock is respectfully requested.

The rejections of Claims 15 and 17-21 under 35 U.S.C. 112, second paragraph are believed obviated by appropriate amendment, herein. Claims 15-21 are amended to use structure and wording consistent with U.S. patent law practice and to more clearly describe the invention. Applicants respectfully request that in view of the amendments, the rejections of Claims 15 and 17-21 under 35 U.S.C. 112, second paragraph, be withdrawn.

Applicants respectfully submit that the above-identified application is now in condition for allowance and early notice of such action is earnestly solicited.

Respectfully submitted,

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